Question 1

Revisit Later

How to Attempt?

Character Count

You are given a string **S** of length **N**. Your friend wants to know the number of times his favorite letter **C** occurs in the string. Your task is to help your friend find and return an integer value representing the number of times a character occurs in a particular string.

Note: *All the characters in the strings are in lowercase.*

Input Specification:

input1 : A string S
input2 : An integer N, representing the length of string
input3 : A character C

Output Specification:

Return an integer value representing the number of times a character occurs in a particular string.

Example 1:

input1 : helloworld
input2 : 10
input3 : l

Output : 3

Attempted: 2/2

PYTHON3 | Compiler: Python 3.11

```
1
2   # Read only region start
3   class UserMainCode(object):
4       @classmethod
5       def count(cls, input1, input2, input3):
6           '''
7           input1 : string
8           input2 : int
9           input3 : string
10
11          Expected return type : int
12          '''
13          # Read only region end
14          # Write code here
15          pass
16          return input1.count(input3)
17
18
```

Use Custom Input

Compi

Daniel has a ball. He wants to find the ball's rebound height, which he dropped from height **H** with an initial velocity **V**. After the **N**th rebound the final velocity of the ball is V_n. Your task is to help him find and return an integer value representing the height to which the ball rebounds after **N** bounces.

Note:

- $H' = H \times e^{2n}$, *where H' is the rebound height, H is the initial height, e is the coefficient of restitution and is the number of bounces.*
- $e^n = V/V_n$, *where V is the initial velocity and V_n is the final velocity*

Input Specification:

input1 : An integer H, representing initial height
input2 : An integer V, representing initial velocity
input3 : An integer V_n, representing final velocity

Output Specification:

Return an integer value representing the height to which the ball rebounds after N bounces.

Example 1:

input1 : 10
input2 : 20
input3 : 5

Output : 160

PYTHON3 | Compiler: Python 3.11

```
# Read only region start
class UserMainCode(object):
    @classmethod
    def rebound(cls, input1, input2, input3):
        '''
        input1 : int
        input2 : int
        input3 : int

        Expected return type : int
        '''
        # Read only region end
        # Write code here
        e = input2 / input3
        res = input1 * (e**2)
        return int(res)
```

Use Custom Input

1. Coding

1 2

Attempted: 2/2

Question 1

Revisit Later

How to Attempt?

Even Odd

Jack has an array **A** of length **N**. He wants to label whether the number in the array is even or odd. Your task is to help him find and return a string with labels even or odd in sequence according to which the numbers appear in the array.

Input Specification:

input1 : An integer array A, representing the array of numbers
input2 : A integer N, representing the length of array

Output Specification:

Return a string with labels even or odd in sequence according to which the numbers appear in the array.

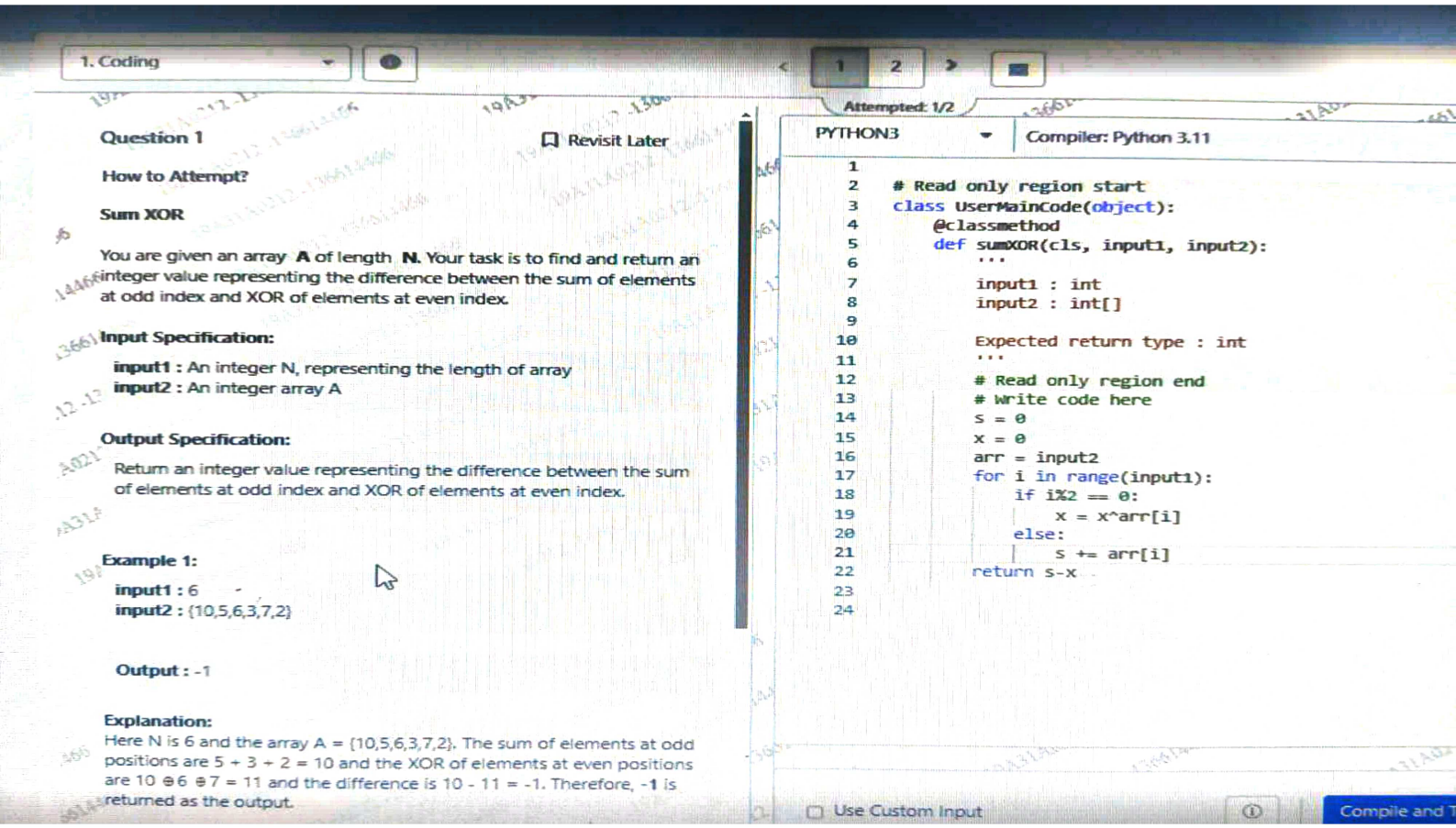
Example 1:

input1 : [1,2,3,4,5,6]
input2 : 6

PYTHON3 | Compiler: Python 3.11

```
1
2   # Read only region start
3   class UserMainCode(object):
4       @classmethod
5       def evenOdd(cls, input1, input2):
6           '''
7           input1 : int[]
8           input2 : int
9
10          Expected return type : string
11          '''
12          # Read only region end
13          # Write code here
14          res = ""
15          for ele in input1:
16              if ele%2 == 0:
17                  res += "Even"
18              else:
19                  res += "Odd"
20          return res
21
```

Use Custom Input | Compile and Test


1. Coding
1
2
Attempted: 1/2
Question 1
Revisit Later
How to Attempt?
Sum XOR
You are given an array A of length N. Your task is to find and return an integer value representing the difference between the sum of elements at odd index and XOR of elements at even index.
Input Specification:
input1 : An integer N, representing the length of array
input2 : An integer array A
Output Specification:
Return an integer value representing the difference between the sum of elements at odd index and XOR of elements at even index.
Example 1:
input1 : 6
input2 : {10,5,6,3,7,2}
Output : -1
Explanation:
Here N is 6 and the array A = {10,5,6,3,7,2}. The sum of elements at odd positions are 5 + 3 + 2 = 10 and the XOR of elements at even positions are 10 ⊕ 6 ⊕ 7 = 11 and the difference is 10 - 11 = -1. Therefore, -1 is returned as the output.
PYTHON3
Compiler: Python 3.11
1
2 # Read only region start
3 class UserMainCode(object):
4 @classmethod
5 def sumXOR(cls, input1, input2):
6 '''
7 input1 : int
8 input2 : int[]
9
10 Expected return type : int
11 '''
12 # Read only region end
13 # Write code here
14 s = 0
15 x = 0
16 arr = input2
17 for i in range(input1):
18 if i%2 == 0:
19 x = x^arr[i]
20 else:
21 s += arr[i]
22 return s-x
23
24
Use Custom Input
Compile and

Question 2

Revisit Later

How to Attempt?

Maximize Pair Product

Noah is given an integer array **A** of length **N.** He must perform the following operations on the array:

- Select any integer pair/s from the array with their sum equal to 18.
- From this select the pair with the maximum product such that the first element of the pair is greater than the second element of the pair.

Your task is to help Noah find and return a pair in the form of an integer array which satisfies the conditions mentioned.

Input Specification:

input1 : An integer value N, representing the size of array A.
input2 : An integer array A.

Output Specification:

Return a pair in the form of an integer array which satisfies the conditions mentioned.

Example 1:

input1 : 8
input2 : {11,1,2,8,10,11,15,7}

Output : {10,8}

Attempted: 2/2

PYTHON3 | Compiler: Python 3.11

```
# Read only region start
class UserMainCode(object):
    @classmethod
    def findPair(cls, input1, input2):
        '''
        input1 : int
        input2 : int[]

        Expected return type : int[]
        '''
        # Read only region end
        # Write code here
        max_pro = 0
        arr = input2
        res = []
        for i in range(input1-1):
            for j in range(i+1, input1):
                if arr[i]+arr[j] == 18:
                    temp = arr[i]*arr[j]
                    if temp >= max_pro:
                        max_pro = temp
                        res = sorted([arr[i], arr[j]], reverse=True)

        return res
```

Use Custom Input

Compile and Test

Submit Code

Question 2

Revisit Later

How to Attempt?

Special Fibonacci

Alex is exploring a series and she came across a special series, in which

- f(N) = f(N-1) * f(N-1) + f(N-2) * f(N-2)
- where f(0) = 1, f(1) = 1

Your task is to help Alex find and return an integer value, representing the **N**th number in this special series.

Note: *Return the output modulo 47.*

Input Specification:

input1 : An integer value N.

Output Specification:

Return an integer value, representing the Nth number in this special series.

Example 1:

Attempted: 2/2

PYTHON3 | Compiler: Python 3.11

```
# Read only region start
class UserMainCode(object):
    @classmethod
    def specialFibonacci(cls, input1):
        '''
        input1 : int

        Expected return type : int
        '''
        # Read only region end
        # Write code here
        res=[0]*(input1+1)
        res[0]=1
        res[1]=1
        for i in range(2,input1+1):
            res[i]=(res[i-1]*res[i-1]+res[i-2]*res[i-2])%47
        return res[input1]
```

IntelliSense has loaded

Use Custom Input | Compile and Test | Submit Code

Attempted: 2/2

Question 2

Revisit Later

How to Attempt?

Maximum Permutation Value

You are given a string array of length **N**. Your task is to find and return an integer value representing the maximum permutation count of the strings after removing all the vowels from every element in the string array.

Note:

- *Consider all the letters in the string as different (if the word is "doll", then consider both 'l's as different).*
- *If there are no permutable characters then return 0.*
- *The string consists of both uppercase and lowercase characters.*

Input Specification:

input1 : A string array of length N.
input2 : An integer N, representing the size of the string array.

Output Specification:

Return an integer value representing the maximum permutation count of the string elements.

Example 1:

input1 : {hello,ccbc,aaeiou}
inout2 : 3

PYTHON3 | Compiler: Python 3.11

```
    @classmethod
    def maxPermutationValue(cls, input1, input2):
        '''
        input1 : string[]
        input2 : int

        Expected return type : int
        '''
        # Read only region end
        # Write code here
        def fact(n):
            if n<=1:
                return 1
            return n*fact(n-1)
        val=0
        for word in input1:
            res=""
            for char in word.lower():
                if char not in "aeiou":
                    res+=char
            if len(res)!=0:
                val=max(val,fact(len(res)))
        return val
```

Use Custom Input

Compile and Test

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Question 1

Revisit Later

How to Attempt?

Reverse Array

Ian has been given an array **A** of length **N** and he wants to find the sum of even positions after reversing the array. Your task is to help him find and return an integer value representing sum of the array elements present at the even positions of the reversed array.

Input Specification:

input1 : A reversed integer array A
input2 : An integer N, representing length of the array.

Output Specification:

Return an integer value representing sum of the array elements present at the even positions of the array.

Example 1:

input1 : {10,20,30,40,50,60}
input2 : 6

PYTHON3 | Compiler: Python 3.11

```
# Read only region start
class UserMainCode(object):
    @classmethod
    def evensum(cls, input1, input2):
        '''
        input1 : int[]
        input2 : int

        Expected return type : int
        '''
        # Read only region end
        # write code here
        x=input1[::-1]
        return sum([x[i] for i in range(input2) if i%2==0])
```

Use Custom Input | Compile and Test | Submit Code

1. Coding

1 2

File Version

Attempted: 2/2

You are given a string array **S** that contains the names of some files along with their versions. Your task is to find and return an integer value representing the latest version out of all the files that are correctly named in the array. A file is considered correct if it follows the format of the file named as "File_X" (where X represents the file version number). Return -1 if there are no correct files in the array.

Note:

- *A file is incorrect if the name of the file does not match the format.*
- *If there is no file in the files array then also return -1.*

Input Specification:

input1 : A string array S, representing the names of the files.
input2 : An integer value representing the size of the array.

Output Specification:

Return an integer value representing the latest version out of all the files that are correctly named in the array.

Example 1:

input1 : {File_1,File_3,File_2}
input2 : 3

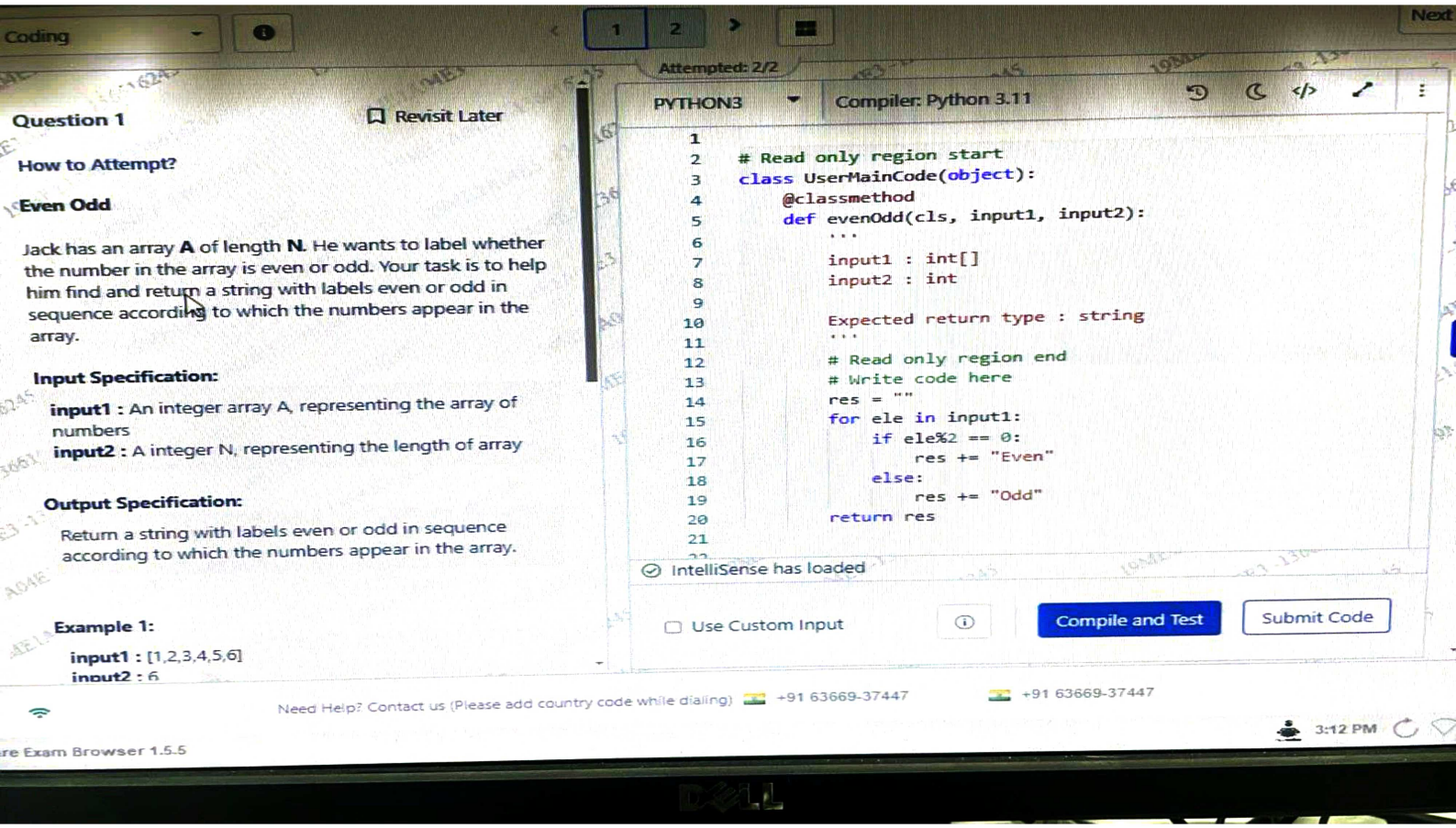
Output : 3

Explanation:

PYTHON3 | Compiler: Python 3.11

```
1
2   # Read only region start
3   class UserMainCode(object):
4       @classmethod
5       def findMaxVersion(cls, input1, input2):
6           '''
7           input1 : string[]
8           input2 : int
9
10          Expected return type : int
11          '''
12          # Read only region end
13          # Write code here
14          import re
15          if input2==0:
16              return -1
17          maxversion = -1
18          pattern = r"File_(\d+)"
19          for file in input1:
20              match = re.match(pattern, file.strip())
21              if match:
22                  version = int(match.group(1))
23                  maxversion = max(maxversion, version)
24          return maxversion
25
26
```

Use Custom Input


Coding
1
2
Next
Attempted: 2/2
Question 1
Revisit Later
How to Attempt?
Even Odd
Jack has an array A of length N. He wants to label whether the number in the array is even or odd. Your task is to help him find and return a string with labels even or odd in sequence according to which the numbers appear in the array.
Input Specification:
input1 : An integer array A, representing the array of numbers
input2 : A integer N, representing the length of array
Output Specification:
Return a string with labels even or odd in sequence according to which the numbers appear in the array.
Example 1:
input1 : [1,2,3,4,5,6]
input2 : 6
PYTHON3
Compiler: Python 3.11
# Read only region start
class UserMainCode(object):
@classmethod
def evenOdd(cls, input1, input2):
'''
input1 : int[]
input2 : int
Expected return type : string
'''
# Read only region end
# Write code here
res = ""
for ele in input1:
if ele%2 == 0:
res += "Even"
else:
res += "Odd"
return res
IntelliSense has loaded
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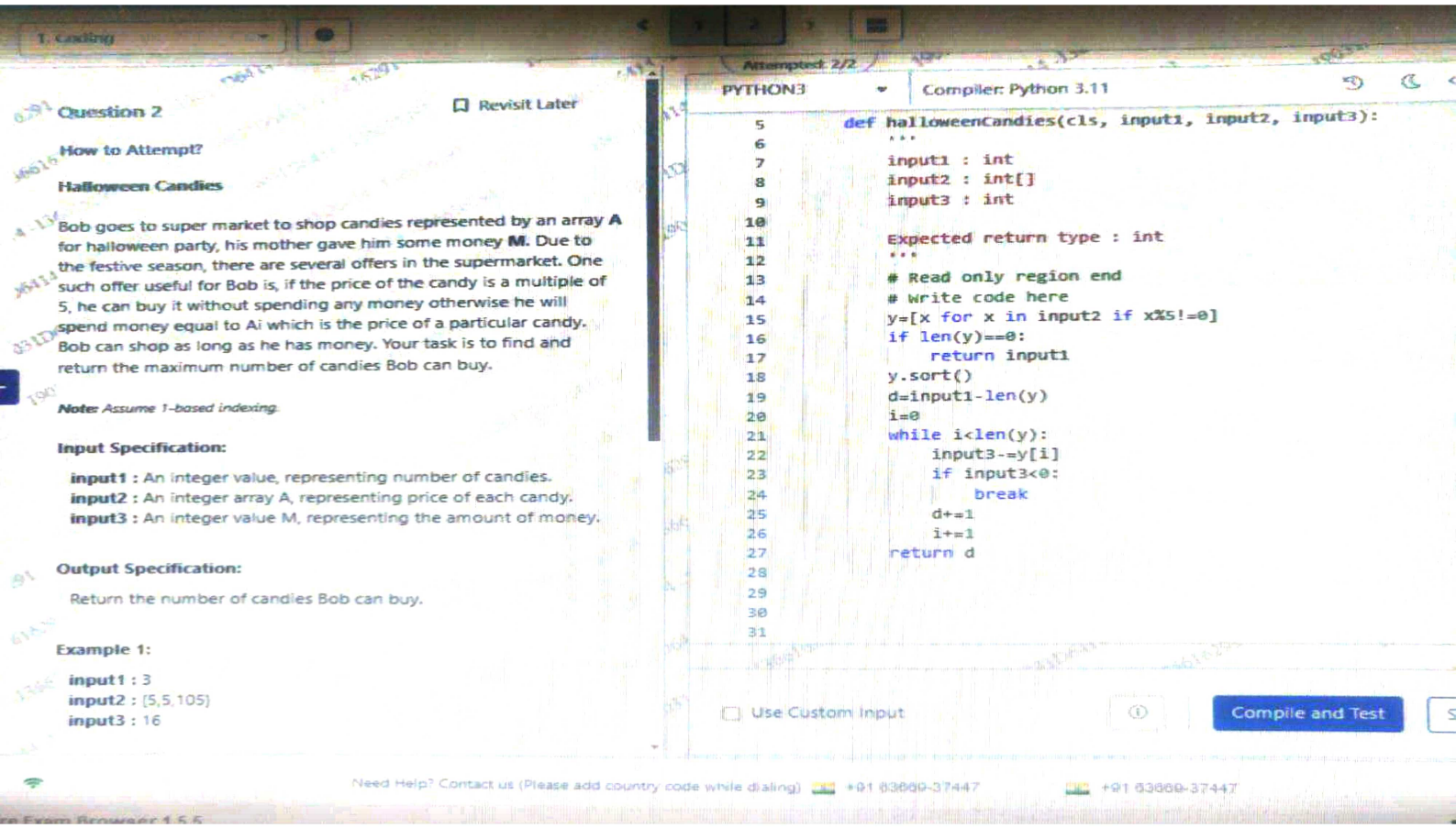
3:12 PM



1. Coding

Attempted 2/2

Question 2

Revisit Later

How to Attempt?

Halloween Candies

Bob goes to super market to shop candies represented by an array **A** for halloween party, his mother gave him some money **M**. Due to the festive season, there are several offers in the supermarket. One such offer useful for Bob is, if the price of the candy is a multiple of 5, he can buy it without spending any money otherwise he will spend money equal to Ai which is the price of a particular candy. Bob can shop as long as he has money. Your task is to find and return the maximum number of candies Bob can buy.

Note: *Assume 1-based indexing.*

Input Specification:

input1 : An integer value, representing number of candies.
input2 : An integer array A, representing price of each candy.
input3 : An integer value M, representing the amount of money.

Output Specification:

Return the number of candies Bob can buy.

Example 1:

input1 : 3
input2 : {5,5,105}
input3 : 16

PYTHON3 | Compiler: Python 3.11

```
def halloweenCandies(cls, input1, input2, input3):
    '''
    input1 : int
    input2 : int[]
    input3 : int

    Expected return type : int
    '''
    # Read only region end
    # Write code here
    y=[x for x in input2 if x%5!=0]
    if len(y)==0:
        return input1
    y.sort()
    d=input1-len(y)
    i=0
    while i<len(y):
        input3-=y[i]
        if input3<0:
            break
        d+=1
        i+=1
    return d
```

Use Custom Input

Compile and Test

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1. Coding

1 2

Attempted: 2/2

Poet and Rhymes

A poet has asked you for assistance in writing poems. He has given you a string **S** and a dictionary **D** and he asks you to find, from the dictionary, a word which rhymes best with S. Words are said to rhyme when the last syllables of the words are the same, like "cave" and "gave", or "typical" and "critical." The words will be deemed to rhyme best if the last few characters of the words match the most.

Your task is to find and return a string value denoting the word which rhymes best with S, from the dictionary D. If no such word is found, return the string "No Word".

Note:

- *If all the characters match, it is the same word and not a rhyming word.*
- *All the given words are in lowercase.*
- *If multiple rhyming words are found, then choose the word with the least index.*

Input Specification:

input1 : A string value S, representing a single word
input2 : A string array D, representing the dictionary
input3 : An integer value representing the length of array D

Output Specification:

Return a string value denoting the word which rhymes best with S from the dictionary D. If no such word is found, return the string "No Word".

PYTHON3 | Compiler: Python 3.11

```
14      # Write code here
15      res="No Word"
16      max_val=0
17      t=input1[::-1]
18      for word in input2:
19          if word!=input1:
20              curr=0
21              s=word[::-1]
22              i=0
23              while i<min(len(s),len(t)):
24                  if s[i]==t[i]:
25                      curr+=1
26                  else:
27                      break
28                  i+=1
29              if curr>max_val:
30                  max_val=curr
31                  res=word
32      return res
33
34
```

Use Custom Input

Compile and Test

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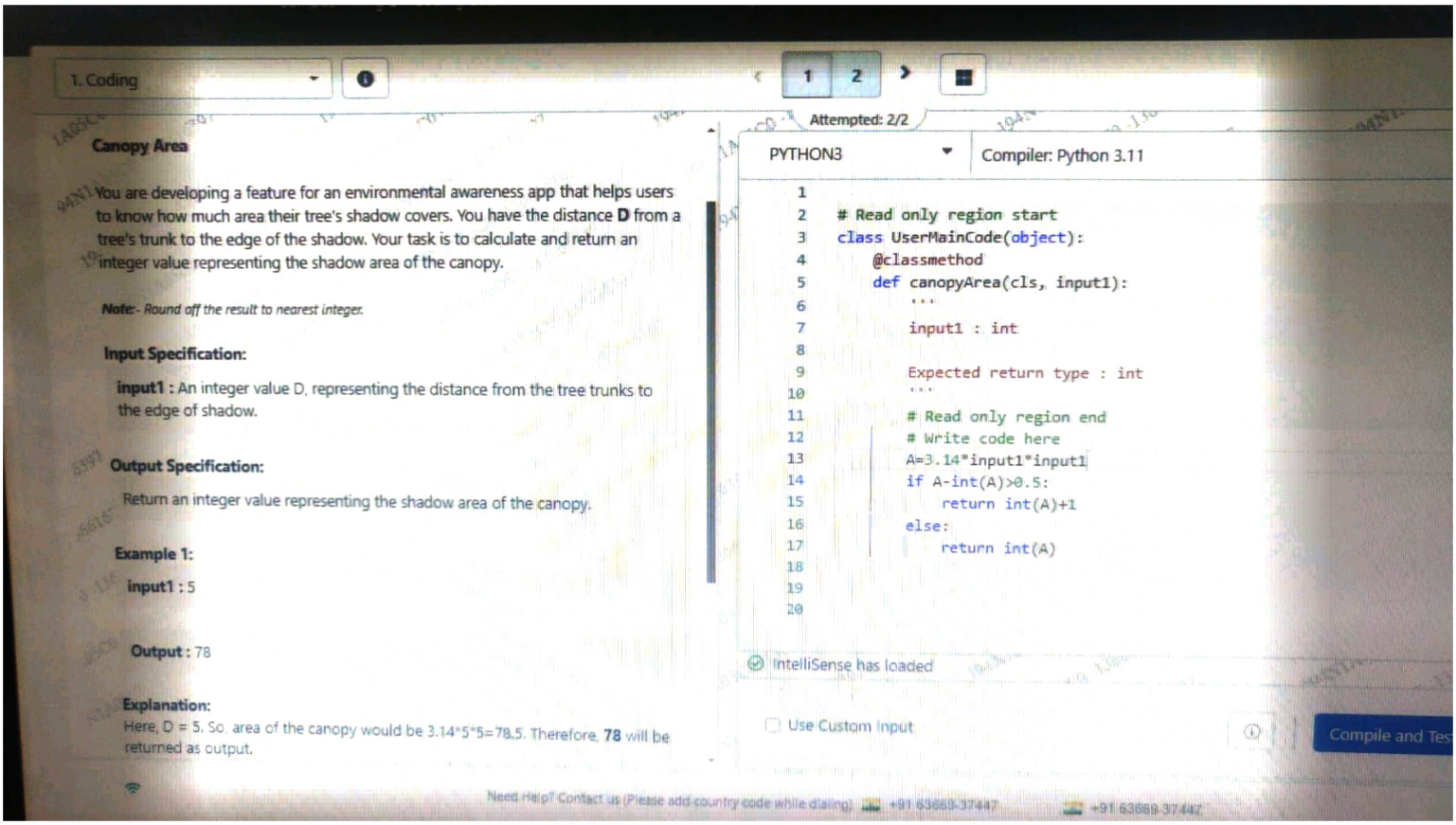
1. Coding
1
2
Attempted: 2/2
Canopy Area
You are developing a feature for an environmental awareness app that helps users to know how much area their tree's shadow covers. You have the distance D from a tree's trunk to the edge of the shadow. Your task is to calculate and return an integer value representing the shadow area of the canopy.
Note:- Round off the result to nearest integer.
Input Specification:
input1 : An integer value D, representing the distance from the tree trunks to the edge of shadow.
Output Specification:
Return an integer value representing the shadow area of the canopy.
Example 1:
input1 : 5
Output : 78
Explanation:
Here, D = 5. So, area of the canopy would be 3.14*5*5=78.5. Therefore, 78 will be returned as output.
PYTHON3
Compiler: Python 3.11
# Read only region start
class UserMainCode(object):
@classmethod
def canopyArea(cls, input1):
'''
input1 : int
Expected return type : int
'''
# Read only region end
# Write code here
A=3.14*input1*input1
if A-int(A)>0.5:
return int(A)+1
else:
return int(A)
IntelliSense has loaded
Use Custom Input
Compile and Tes
Need Help? Contact us (Please add country code while dialing) +91 63669 37447
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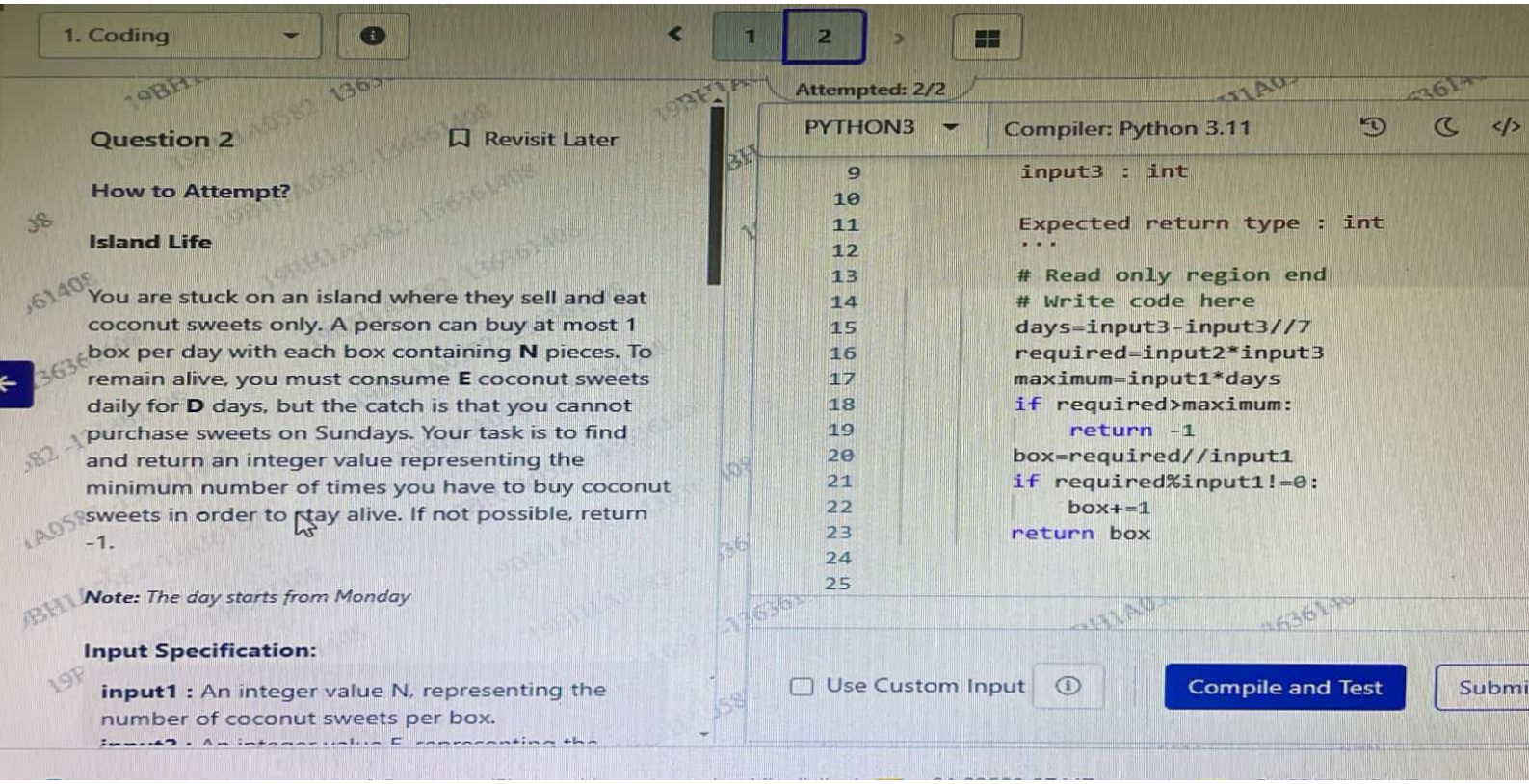
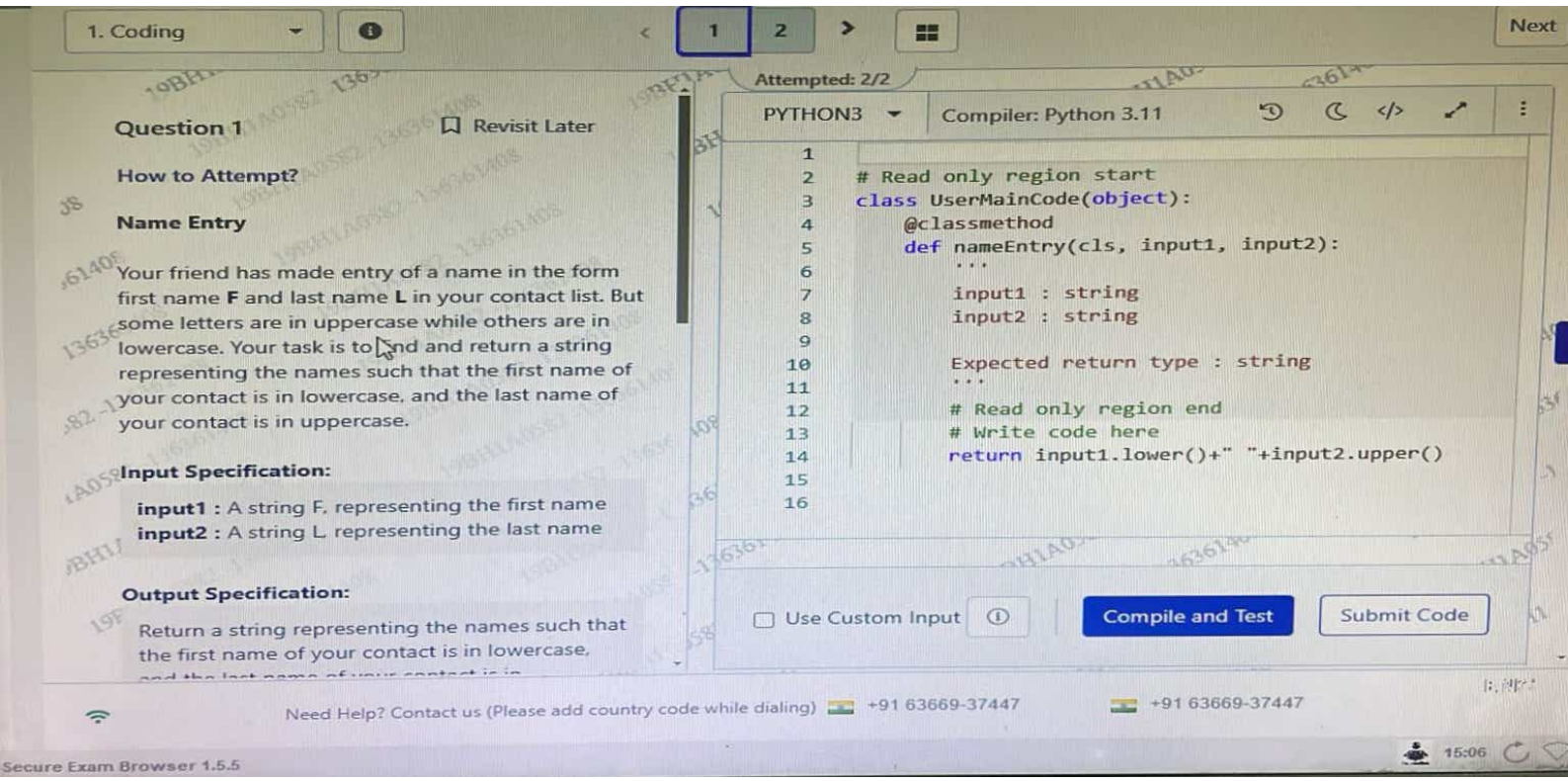

1. Coding
1
2
Attempted: 2/2
Question 2
Revisit Later
How to Attempt?
Island Life
You are stuck on an island where they sell and eat coconut sweets only. A person can buy at most 1 box per day with each box containing N pieces. To remain alive, you must consume E coconut sweets daily for D days, but the catch is that you cannot purchase sweets on Sundays. Your task is to find and return an integer value representing the minimum number of times you have to buy coconut sweets in order to stay alive. If not possible, return -1.
Note: The day starts from Monday
Input Specification:
input1 : An integer value N, representing the number of coconut sweets per box.
PYTHON3
Compiler: Python 3.11
input3 : int
Expected return type : int
# Read only region end
# Write code here
days=input3-input3//7
required=input2*input3
maximum=input1*days
if required>maximum:
return -1
box=required//input1
if required%input1!=0:
box+=1
return box
Use Custom Input
Compile and Test
Submi


1. Coding
1
2
Next
Attempted: 2/2
Question 1
Revisit Later
How to Attempt?
Name Entry
Your friend has made entry of a name in the form first name F and last name L in your contact list. But some letters are in uppercase while others are in lowercase. Your task is to find and return a string representing the names such that the first name of your contact is in lowercase, and the last name of your contact is in uppercase.
Input Specification:
input1 : A string F, representing the first name
input2 : A string L representing the last name
Output Specification:
Return a string representing the names such that the first name of your contact is in lowercase,
PYTHON3
Compiler: Python 3.11
1
2 # Read only region start
3 class UserMainCode(object):
4 @classmethod
5 def nameEntry(cls, input1, input2):
6 '''
7 input1 : string
8 input2 : string
9
10 Expected return type : string
11 '''
12 # Read only region end
13 # Write code here
14 return input1.lower()+" "+input2.upper()
15
16
Use Custom Input
Compile and Test
Submit Code
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Secure Exam Browser 1.5.5
15:06

1. Coding

1 2

Attempted: 2/2

Question 1

Revisit Later

How to Attempt?

Hike Trial

You are on a hiking trail represented by an array **A** of length **N**, where the trail initially ascends and then descends, forming a single peak. Your task is to find and return an integer value representing the elevation of the summit.

Input Specification:

input1 : An integer array A
input2 : An integer value N denoting the size of A

Output Specification:

Return an integer value representing the elevation of the summit.

Example 1:

PYTHON3 | Compiler: Python 3.11

```
1
2   # Read only region start
3   class UserMainCode(object):
4       @classmethod
5       def hiketrail(cls, input1, input2
6           '''
7           input1 : int[]
8           input2 : int
9
10          Expected return type : int
11          '''
12          # Read only region end
13          # Write code here
14          return max(input1)
15
16
```

IntelliSense has loaded

Use Custom Input

Question 1

Revisit Later

How to Attempt?

Prime Number Picnic

You are planning a picnic for a group of friends who love math. To make it interesting, you decided to bring unique numbers of items, **N**. Your task is to find and return an integer value representing the sum of all the prime numbers till N. In case, the number of items is 0 or 1, return 0.

Note: *Prime numbers are natural numbers that are divisible by only 1 and the number itself.*

Input Specification:

input1 : An integer value N

Output Specification:

Return an integer value representing the sum of all the prime numbers till N. In case, the number of items is 0 or 1, return 0.

Attempted: 2/2

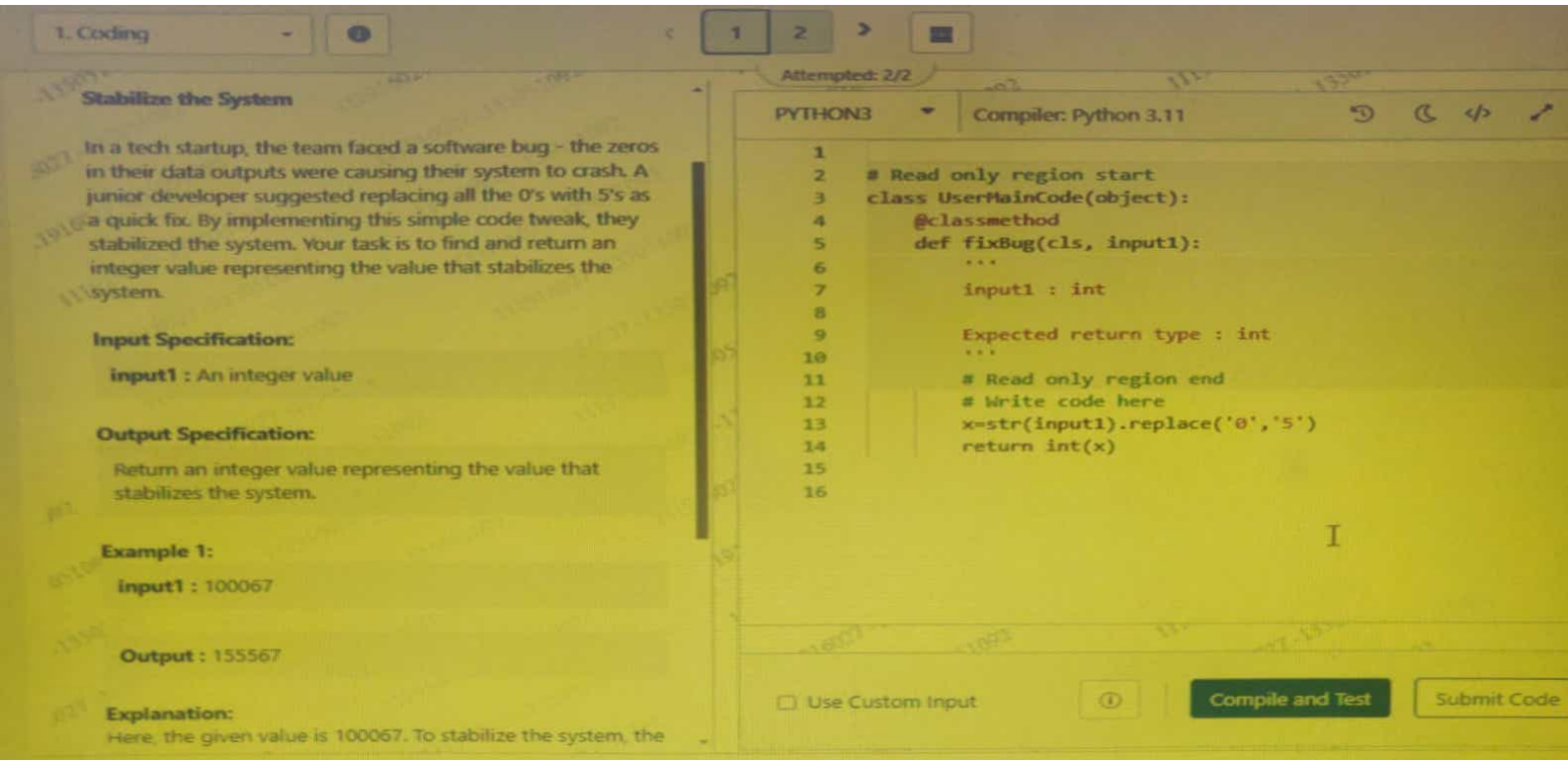
PYTHON3 | Compiler: Python 3.11

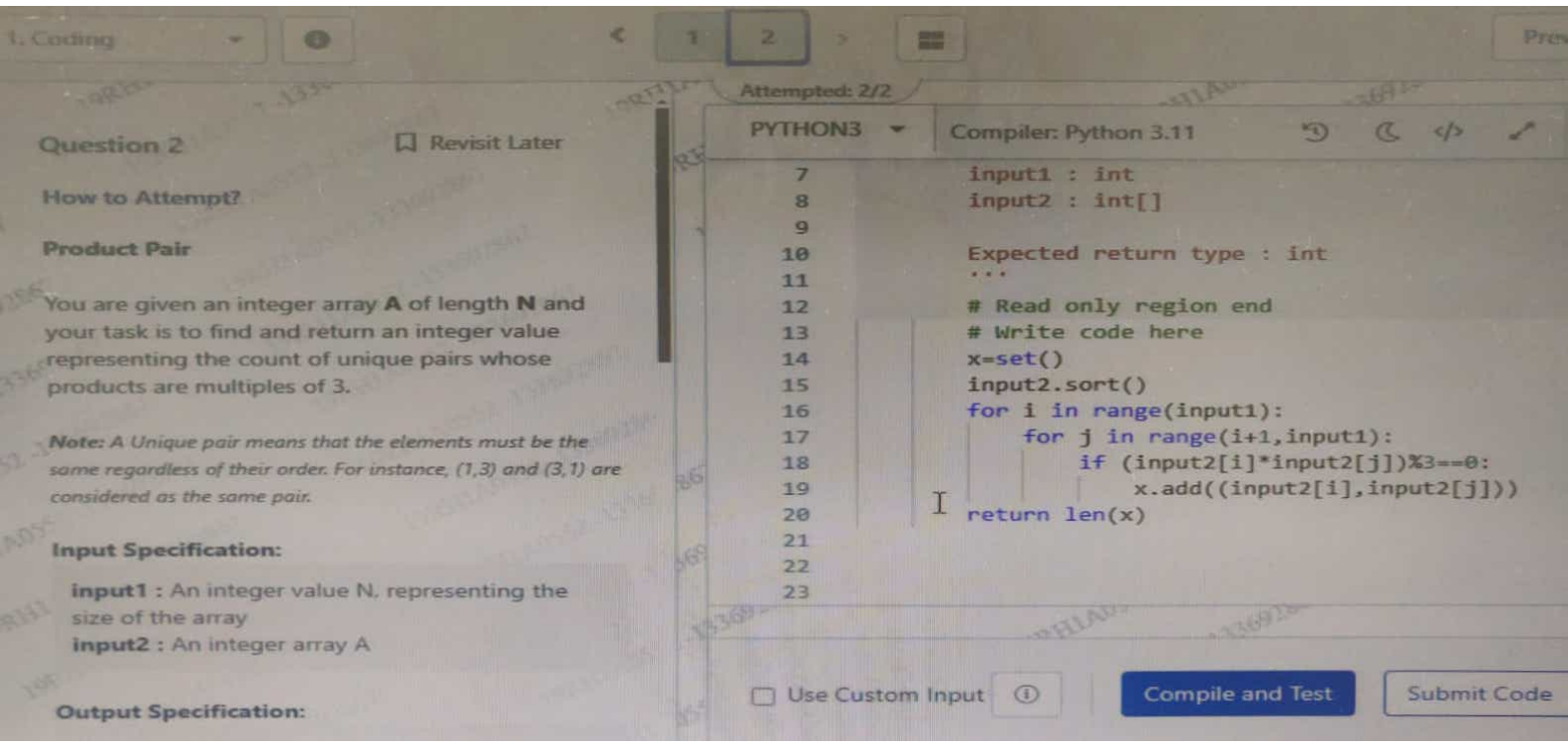
```
    @classmethod
    def primeSum(cls, input1):
        '''
        input1 : int

        Expected return type : int
        '''
        # Read only region end
        # Write code here
        def prime(n):
            for i in range(2,int(n**0.5)+1):
                if n%i==0:
                    return False
            return True
        res=0
        for i in range(input1+1):
            if i not in [0,1] and prime(i):
                res+=i
        return res
```

IntelliSense has loaded

Use Custom Input

Compile and Test | Submit Code


1. Coding
1
2
Attempted: 2/2
Stabilize the System
In a tech startup, the team faced a software bug - the zeros in their data outputs were causing their system to crash. A junior developer suggested replacing all the 0's with 5's as a quick fix. By implementing this simple code tweak, they stabilized the system. Your task is to find and return an integer value representing the value that stabilizes the system.
Input Specification:
input1 : An integer value
Output Specification:
Return an integer value representing the value that stabilizes the system.
Example 1:
input1 : 100067
Output : 155567
Explanation:
Here, the given value is 100067. To stabilize the system, the
PYTHON3
Compiler: Python 3.11
# Read only region start
class UserMainCode(object):
@classmethod
def fixBug(cls, input1):
'''
input1 : int
Expected return type : int
'''
# Read only region end
# Write code here
x=str(input1).replace('0','5')
return int(x)
Use Custom Input
Compile and Test
Submit Code


1. Coding
1
2
Attempted: 2/2
Question 2
Revisit Later
How to Attempt?
Product Pair
You are given an integer array A of length N and your task is to find and return an integer value representing the count of unique pairs whose products are multiples of 3.
Note: A Unique pair means that the elements must be the same regardless of their order. For instance, (1,3) and (3,1) are considered as the same pair.
Input Specification:
input1 : An integer value N, representing the size of the array
input2 : An integer array A
Output Specification:
PYTHON3
Compiler: Python 3.11
input1 : int
input2 : int[]
Expected return type : int
'''
# Read only region end
# Write code here
x=set()
input2.sort()
for i in range(input1):
for j in range(i+1,input1):
if (input2[i]*input2[j])%3==0:
x.add((input2[i],input2[j]))
return len(x)
Use Custom Input
Compile and Test
Submit Code

How to Attempt?

Chocolate Jar

You are given an integer array of size **N**, representing jars of chocolates. Three students A, B, and C respectively, will pick chocolates one by one from each chocolate jar, till the jar is empty, and then repeat the same with the rest of the jars. Your task is to find and return an integer value representing the total number of chocolates that student A will have, after all the chocolates have been picked from all the jars.

Input Specification:

input1 : An integer array representing the quantity of chocolates in each jar.
input2 : An integer value N representing the number of jars.

Output Specification:

Return an integer value representing the total number of chocolates that student A will have, after all the chocolates are picked.

Example 1:

input1 : [3,2,6]
input2 : 3

Attempts: 2/2

```
1
2   # Read only region start
3   class UserMainCode(object):
4       @classmethod
5       def chocolatesOfA(cls, input1, input2):
6           '''
7           input1 : int[]
8           input2 : int
9
10          Expected return type : int
11          '''
12          # Read only region end
13          # Write code here
14          arr = input1
15          c = 0
16          for i in arr:
17              if i == 0:
18                  continue
19              if i <= 3:
20                  c += 1
21              else:
22                  if i%3 == 0:
23                      c += (i//3)
24                  else:
25                      c += (i//3)+1
26          return c
27
```

Question 2

Revisit Later

How to Attempt?

Refueling Vehicles

You are incharge of a convoy of **N** vehicles, each with fuel meter which shows the fuel present in each vehicle in litres. Each vehicles need to travel a distance of **X** kilometers. If the fuel becomes empty before reaching X kilometers the vehicle can refuel but the refueling will be of X litres and if the vehicles completes the X kilometers where fuel is left over then the extra fuel will be given to the next vehicle in the convoy. You must rearrange the convoy such that the vehicles take minimum refueling stops.
Your task is to find and return an integer value representing the minimum number of refueling stops required by the convoy of vehicles.

Note:

- *The vehicles can go 1 kilometer in a single litre.*
- *The refueling at any point of time will be for X litres only.*

Input Specification:

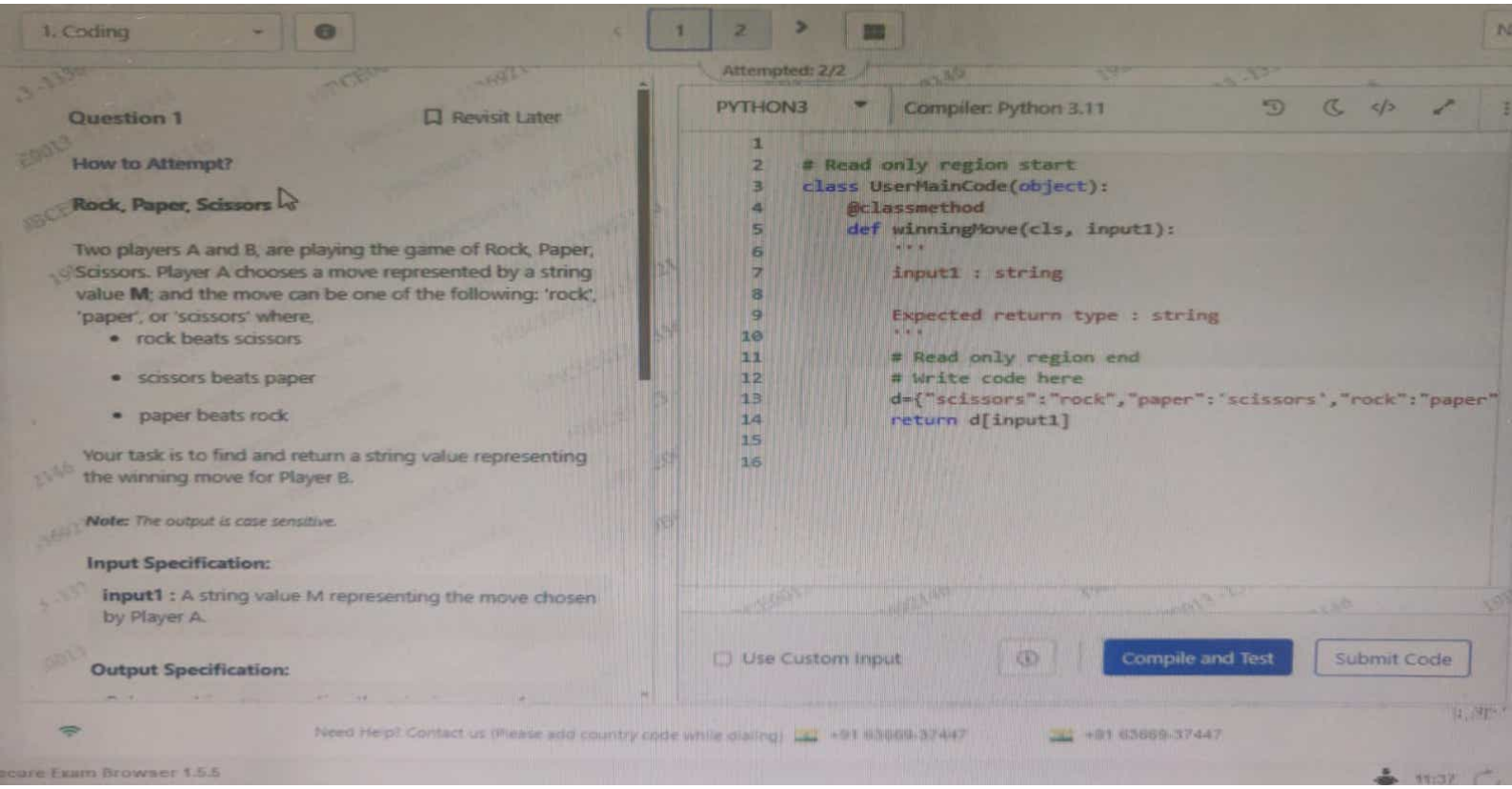
input1 : An integer value X, representing the distance to be travelled.
input2 : An integer value N, representing the number of vehicles in the convoy.

Attempted: 2/2

PYTHON3 | Compiler: Python 3.11

```
15      pass
16      count = 0
17      x = input1
18      fuel = input2
19      arr =input3
20      arr.sort(reverse=True)
21      rem = 0
22      i=0
23      while i < len(arr):
24          ele = arr[i]
25          if ele+rem >= x:
26              rem= (ele+rem)-x
27              if rem < 0:
28                  rem =0
29              i += 1
30          else:
31              rem+= x
32              count += 1
33      return count
34
```

Use Custom Input


1. Coding
1
2
Attempted: 2/2
Question 1
Revisit Later
How to Attempt?
Rock, Paper, Scissors
Two players A and B, are playing the game of Rock, Paper, Scissors. Player A chooses a move represented by a string value M; and the move can be one of the following: 'rock', 'paper', or 'scissors' where,
rock beats scissors
scissors beats paper
paper beats rock
Your task is to find and return a string value representing the winning move for Player B.
Note: The output is case sensitive.
Input Specification:
input1 : A string value M representing the move chosen by Player A.
Output Specification:
PYTHON3
Compiler: Python 3.11
# Read only region start
class UserMainCode(object):
@classmethod
def winningMove(cls, input1):
'''
input1 : string
Expected return type : string
'''
# Read only region end
# Write code here
d={"scissors":"rock","paper":'scissors',"rock":"paper"
return d[input1]
Use Custom Input
Compile and Test
Submit Code
Need Help? Contact us (Please add country code while dialing) +91 63669-37447
+91 63669-37447
Exam Browser 1.5.5

1. Coding

1 2

Attempted: 2/2

Question 1

Revisit Later

How to Attempt?

Financial Dataset

You are working on a financial analyzing tool which represents the daily stock prices of a company over a time. Each element in an integer array **A** of size **N** represents the closing price of the stock for a particular day. Your task is to find and return an integer value representing the total number of days where the stock price decreased, indicating negative growth.

Input Specification:

input1 : An integer array A containing the closing price of the stock.
input2 : An integer value N representing the size of array

Output Specification:

Return an integer value representing the total number of days where the stock price decreased, indicating negative growth.

Example 1:

input1 : {3,5,6,-7,9,10,-12}
input2 : 7

Output : 2

PYTHON3 Compiler: Python 3.11

```
1
2   # Read only region start
3   class UserMainCode(object):
4       @classmethod
5       def decreasedStock(cls, input1, input2):
6           '''
7           input1 : int[]
8           input2 : int
9
10          Expected return type : int
11          '''
12          # Read only region end
13          # Write code here
14          c = 0
15          for i in input1:
16              if i<0:
17                  c += 1
18          return c
19
20
```

Use Custom Input

Question 2

Revisit Later

How to Attempt?

Magical Number

You are given a program to find the count of magical numbers from 1 to **N**. A magical number is defined by the following criteria:

- Convert each number in the range 1 to N (inclusive) to its binary representation.
- Replace '0' with '1' and '1' with '2' in the binary string.
- Calculate the sum of the digits in the modified binary string. If the resultant number is odd, then it is considered a magical number.

Your task is to find and return an integer value representing the count of the magical numbers present within the given range.

Input Specification:

input1 : An integer value N representing the range of numbers.

Output Specification:

Return an integer value representing the count of magical numbers present within the range.

Example 1:

input1 : 2

PYTHON3 | Compiler: Python 3.11

```
1
2   # Read only region start
3   class UserMainCode(object):
4       @classmethod
5       def isMagicalNumber(cls, input1):
6           '''
7           input1 : int
8
9           Expected return type : int
10          '''
11          # Read only region end
12          # Write code here
13          c = 0
14          for i in range(1, input1+1):
15              temp = list(map(int, bin(i)[2:]))
16              s = sum(temp)+len(temp)
17              if s%2 != 0:
18                  c += 1
19          return c
20
21
```

Use Custom Input